TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531



ADMINSITRATIVE AMENDMENT #1 TO:

OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: February 22, 2011

Date Amended: November 17, 2011

Date Expires: February 21, 2016

Permit Number: 560513

Issued To:

Teknor Apex Tennessee Company

Installation Address:

751 Dupree Street

Brownsville

Installation Description:

Specialty Chemicals Plant:

01-Boiler #3

16-Boiler #4

66-Bucket Elevators (2) with Baghouses (2)

70-Boiler #5 (NSPS)

92-Specialty Chemicals Plant (NSPS & MACT)

Emission Source Reference Number: 38-0039

Primary SIC: 28

Renewal Application Due Date: Between May 27, 2015 through August 25, 2015

Responsible Official:

Name: Robert Lincer

Title: General Manager

Facility Contact Person:

Name: Susan Paris

Title: Environmental Manager

Phone: (731) 772-3690

Information Relied Upon:

Letter and application dated October 17, 2011

(Continued on the next page)

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Edw, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

CN-0827 (Rev.9-92)

RDA-1298

ADDENDUM NUMBER 1

ADMINISTRATIVE AMENDMENT # 1 TO TITLE V PERMIT

Facility Name: Teknor Apex Tennessee Company

City: Brownsville

County: Haywood

Date Application Received: October 19, 2011

Date Application Deemed Complete: October 19, 2011

Emission Source Reference No.: 38-0039

Permit No.: 560513

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the ADMINISTRATIVE AMENDEMENT #1 to the Title V operating permit for this facility. The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to the above mentioned facility and to provide practical methods for assuring compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Acronyms

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

I. Identification Information

A. Source Description

Haywood Company produces plasticizers which primarily include phthalate, adipate, and trimellitate for intermediate uses. These specialty chemicals are produced in an acid-alcohol esterification process in any one of four reactor systems at the facility: three batch systems, and one semi-continuous system. Other emission sources at this facility include three boilers for process heating, and a bucket elevator system to supply the dry reactants to the reactors.

B. Facility Classification

- Attainment or Non-Attainment Area Location
 Area is designated as an attainment area for all criteria
 pollutants.
- 2. Company is located in a Class II area.

C. Regulatory Status

PSD/NSR
 This facility is a major source under PSD.

2. MACT Standards

The specialty chemicals plant is not a major source for HAPs by itself; however, the specialty chemicals plant is subject to a final MACT Standard: 40 CFR 63, Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

Facility is also subject to a proposed MACT Standard: 40 CRF 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters.

The specialty chemicals plant is subject to 40 CFR 63 because its sister plant (Plastics Compounding) is a major source of HAPs. These facilities share common ownership and are colocated. Although, the two facilities have different SIC codes, the two plants share a factor of interdependence; therefore, they are technically considered one Title V source, and accordingly are treated as one facility with respect to their HAPs emissions.

3. Program Applicability Are the following programs applicable to the facility? PSD yes NESHAP yes NSPS yes

II. Administrative Amendment # 1

Haywood Company changed its legal name to Teknor Apex Tennessee Company

III. Other Requirements

- A. Emissions Trading

 The facility is not involved in an emission trading program.
- B. Acid Rain Requirements

 This facility is not subject to any requirements in Title IV of the Clean Air Act.
- C. Prevention of Accidental Releases Not Applicable
- D. Greenhouse Gas (GHG) Emissions
 This facility is not a major source of greenhouse gas emissions.

IV. Public Participation Procedures

No notification of this permit amendment was required.

TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531



MODIFICATION #1 TO:

OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: February 22, 2011

Date of Minor Modification #1: July 6, 2012

Date Expires: February 21, 2016

Permit Number:

560513

Issued To:

Teknor Apex Tennessee Company

Installation Address:

751 Dupree Street

Brownsville

Installation Description:

Specialty Chemicals Plant:

01-Boiler #3

16-Boiler #4

66-Bucket Elevators (2) with Baghouses (2)

70-Boiler #5 (NSPS)

92-Specialty Chemicals Plant (NSPS & MACT)

Modification #1: Modification to the bucket elevator system for reactant charging (Source 66). Adding a new dust collector and a new receiver. Removing existing dust collector, BEL-1. Adding a new charge tank for reactant mixing and heating that was formerly performed within the reactor.

Emission Source Reference No.: 38-0039 - Specialty Chemicals Plant

Renewal Application Due Date: Between May 27, 2015 through August 25, 2015

Primary SIC: 28

Responsible Official:

Name: Robert Lincer

Title: General Manager Facility Contact Person:

Name: Susan Paris

Title: Environmental Manager Phone: (731)772-3690

Information Relied Upon:

Letters dated: April 4, 2012 and May 10, 2012

Applications dated: April 2, 2012, April 3, 2012, and April 4, 2012

(Continued on the next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

CN-0827 (Rev.9-92)

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

Minor Modification #1: Material Handling Operation

38-0039-66

Source consists of two (2) bucket elevators with two (2) dust collectors and a HEPA filter, and a pre-charge reactant mixing tank. Adding a new dust collector (ACC-1) and a new receiver (ACC-2). Removing existing dust collector, BEL-1. Adding a pre-charge tank for reactant mixing and heating that was formerly performed within the reactor.

E7-2. Particulate matter emitted from this source shall not exceed 0.01 grains per dry standard cubic foot of exhaust gas. This emission limitation is established pursuant to Rule 1200-03-07-.01(5) of the Tennessee Air Pollution Control regulations and the information contained in the agreement letter dated May 10, 2012 from the permittee. At the reported combined exhaust flow rate in the application, a concentration of 0.01 gr/dscf yields an actual emission rate of 0.47 pounds per hour. This value multiplied by 8760 hours per year, yields an actual emission rate of 2.1 tons per year.

Compliance Method: The dust collectors and filters will be maintained, kept in good operating condition, and inspected semiannually to ensure compliance with the applicable particulate matter limits. Documentation of the semiannual inspections and any maintenance performed will be kept on site for a period of not less than five (5) years. A monthly summary of these logs shall be kept and reported in accordance with Condition E2.

E7-3. Visible emissions from the baghouses serving this source shall not exhibit greater than ten percent (10%) opacity as determined by EPA Method 9, as published in 40 CFR 60, Appendix A (six-minute average). This condition is established pursuant to Rule 1200-03-05-.01(3) of the Tennessee Air Pollution Control Regulations and the agreement letter dated May 10, 2012 from the permittee.

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 (amended on September 12, 2005) that is enclosed as Attachment 1. Reports and certifications shall be submitted in accordance with Condition E2 of this permit.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

M1-1. Conditions E7-2 and E7-3 of this Minor Modification #1 replace Conditions E7-2 and E7-3 of Title V permit #560513. The permittee shall comply with all applicable requirements of this Minor Modification #1 and the Title V permit #560513.

END OF PERMIT CONDITIONS

ADDENDUM NUMBER 2

MINOR MODIFICATION # 1 TO TITLE V PERMIT

Facility Name: Teknor Apex Tennessee Company

City: Brownsville

County: Haywood

Date Application Received: April 9, 2012

Date Application Deemed Complete: May 14, 2012

Emission Source Reference No.: 38-0039

Permit No.: 560513

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the MINOR MODIFICTION #1 to the Title V operating permit for this facility. The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to the above mentioned facility and to provide practical methods for assuring compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Acronyms

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

GHGs - Greenhouse Gases

I. Identification Information

A. Source Description
 List and describe emission source(s):

Haywood Company produces plasticizers which primarily include phthalate, adipate, and trimellitate for intermediate uses. These specialty chemicals are produced in an acid-alcohol esterification process in any one of four reactor systems at the facility: three batch systems, and one semi-continuous system. Other emission sources at this facility include three boilers for process heating, and a bucket elevator system to supply the dry reactants to the reactors.

B. Facility Classification

- 1. Attainment or Non-Attainment Area Location
 Area is designated as an attainment area for all criteria pollutants.
- 2. Company is located in a Class II area.

C. Regulatory Status

PSD/NSR
 This facility is a major source under PSD.

2. MACT Standards

This facility is not a major source for HAPs by itself; however it is subject to a final MACT Standard. The specialty chemicals plant is subject to 40 CFR 63, Subpart FFFF because its sister plant (Plastics Compounding) is a major source of HAPs. These facilities share common ownership and are co-located. Although, the two facilities have different SIC codes, the two plants share a factor of interdependence; therefore, they are technically considered one Title V source, and accordingly are treated as one facility with respect to their HAPs emissions.

3. Program Applicability
Are the following programs applicable to the facility?
PSD yes
NESHAP yes, Subpart FFFF
NSPS yes, Subpart Dc

II. Minor Modification # 1 (describe the minor mod in terms of emissions and applicable requirements)

Teknor Apex will add a new dust collector (ACC-1) and a new receiver (ACC-2) to the bucket elevator system (Source 66). In doing so, the project will involve the removal of existing dust collector, BEL-1. PM emissions will slightly increase with the addition of the new receiver.

They will also be adding a charge tank for reactant mixing and heating as part of Source 92. The reactant mixing and heating is currently accomplished within the reactor, so this change will not result in an emissions increase, as the heating and mixing are already accounted for in the 38.1 lb VOC / batch emission factor.

III. Other Requirements

A. Emissions Trading

The facility is not involved in an emission trading program.

B. Acid Rain Requirements

This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases

Not applicable

D. Greenhouse Gas (GHG) Emissions

This facility is not a major source of greenhouse gas emissions.

IV. Public Participation Procedures

Notification of this draft permit was e-mailed to the following environmental agencies:

- 1. EPA Region IV
- 2. State of Mississippi, State of Arkansas, State of Missouri, Shelby County Health Department

TITLE V PERMIT STATEMENT (RENEWAL)

Facility Name: Haywood Company - Specialty Chemicals Plant

City: Brownsville

12

County: Haywood

Date Application Received: November 29, 2006

Date Application Deemed Complete: November 29, 2006

Emission Source Reference No.: 38-0039

Permit No.: 560513

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to *Haywood Company – Specialty Chemicals Plant* and to provide practical methods for assuring compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

Acronyms

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

I. Identification Information

A. Source Description

Haywood Company produces plasticizers which primarily include phthalate, adipate, and trimellitate for intermediate uses. These specialty chemicals are produced in an acid-alcohol esterification process in any one of four reactor systems at the facility: three batch systems, and one semi-continuous system. Other emission sources at this facility include three boilers for process heating, and a bucket elevator system to supply the dry reactants to the reactors.

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B. Facility Classification

1. Attainment or Non-Attainment Area Location

Area is designated as an attainment area for all criteria pollutants.

2. Company is located in a Class II area.

C. Regulatory Status

I. PSD/NSR

This facility is a major source under PSD.

2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status?	
		Major Source Status	Non-Major Source Status
PM	Yes	No	
PM ₁₀	Yes	N/A	
SO ₂	Yes	Yes	
VOC	Yes	No	
NO _X	Yes	Yes	
CO	Yes	No	
Individual HAP	Yes	No	
Total HAPs	Yes	No	
		"	

3. MACT Standards

The specialty chemicals plant is not a major source for HAPs by itself; however, the specialty chemicals plant is subject to a final MACT Standard: 40 CFR 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

The specialty chemicals plant is subject to 40 CFR 63, Subpart FFFF because its sister plant (Plastics Compounding) is a major source of HAPs. These facilities share common ownership and are co-located. Although, the two facilities have different SIC codes, the two plants share a factor of interdependence; therefore, they are technically considered one Title V source, and accordingly are treated as one facility with respect to their HAPs emissions.

4. Program Applicability

Are the following programs applicable to the facility?

PSD Yes

NESHAP Yes

NSPS Yes

II. Compliance Information

A. Compliance Status

Is the facility currently in compliance with all applicable requirements? Yes

Are there any applicable requirements that will become effective during the permit term? Yes

III. Other Requirements

A. Emissions Trading

The facility is not involved in an emission trading program.

B. Acid Rain Requirements

This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases

Not applicable

IV. Public Participation Procedures

Notification of this draft permit was mailed to the following environmental agencies:

- I. EPA Region IV
- 2. State of Mississippi, State of Arkansas, State of Missouri, Shelby County Health Department

V. Permit History

Title V Operating Permit No. 560513 represents the first renewal of the original Title V Permit No. 546546 issued June 3, 2002. The following changes have occurred under the original Title V permit and with this renewal:

- One batch reactor system (R3) was converted to operate in a semi-continuous manner, and added storage tanks (Construction permit #954453P September 27, 2001, and Minor Modification April 10, 2003)
- Emission calculation protocol was updated and refined. (Minor Modification March 23, 2004)
- Added new storage tanks (Minor Modification March 23, 2004)
- Added new dry ingredients charging system (Minor Modification May 3, 2004)
- Added new inert gas generator (Minor Modification April 25, 2005)
- Corrected typographical error (Administrative Amendment May 24, 2005)
- Added new storage tanks (Minor Modification August 8, 2005)
- 40 CFR Part 60, Subpart K_b has been amended such that the storage tanks at this facility are no longer subject to those requirements (chemicals stored do not exceed the vapor pressure thresholds). Therefore, those storage tanks that have previously been listed in the Title V permit solely due to their NSPS status have been deemed insignificant emission sources, and do not appear in the Title V renewal.
- The requirements of 40 CFR 63, Subpart FFFF as they apply to this facility are incorporated into this Title V renewal.
- Updated the Opacity Matrix as amended September 12, 2005.
- Updated Condition E2(b) to include language that specifically states to certify 'compliance' as continuous or intermittent.
- Updated the attachments for AP42, fuel burning emission factors.